

IN THE SPECIFICATION

Please replace the first paragraph on page 21 with the following:

It is well established that TF is the physiologic trigger of blood coagulation. Therefore, the anticoagulant effects of various inhibitors were examined in TF-initiated plasma coagulation assay. Purified inhibitors were added to pooled human plasma at different concentrations and plasma clotting was initiated by adding a diluted thromboplastin reagent (1:100 dilution of Dade Innovin®). Innovin® is a commercial preparation of recombinant human TF reconstituted with an optimized phospholipid mixtures. The assay reagent contains both TF and anionic phospholipid to allow initiation and propagation of the coagulation cascade, and is a simplified system mimicking plasma clotting in the presence of activated TF-bearing cells/microparticles and platelets. The clotting time of the pooled plasma with added control buffer was 40.7 sec. With increasing concentration of added inhibitors, the clotting time was progressively prolonged. The concentration of inhibitors prolonging the clotting time 1.5 fold (i.e. from 40.7 to 61.1 sec) can be determined from the concentration-clotting time curves. Table 1 shows the concentrations required to prolong clotting time 1.5 fold for various inhibitors and their relative potency ranking. Since TFPI is the most important physiological regulator of the tissue factor pathway of coagulation in blood, and mammalian cell-derived TFPI may resemble most the former, we have chosen recombinant C127 FL-TFPI as a reference standard for comparison. TAP-ANV, presumably targeting the prothrombinase, is 86-fold more potent compare to C127 FL-TFPI. ANV-6L15, designed to inhibit TF/VIIa, is 12 fold more potent than C127 FL-TFPI. ANV-K_{APP} (possibly targeting TF/VIIa, XIa, VIIIa/IXa, and Va/Xa), ANV-KK_{TFPI} (presumably inhibiting TF/VIIa and Va/Xa), ~~*E. coli* derived non-glycosylated TFPI (presumably inhibiting TF/VIIa/Xa)~~ and X-K1_{TFPI} hybrid (likely inhibiting TF/VIIa) are 6-7 fold more potent than C127 FL-TFPI. E.

coli-derived non-glycosylated TFPI and ANV alone is are 2.3 2.4 fold more potent than
C127 FL-TFPI. TAP has the same potency as C127 FL-TFPI. Kunitz inhibitors alone, as
exemplified here by C127 CT-TFPI, TFPI1-160, and 6L15, are 19-, 40- and 5986-fold,
respectively, less active than C127 FL-TFPI.

5

Please replace Table 1 on page 22 with the following:

Effects of various inhibitors on tissue factor-induced clotting time in human plasma.

Inhibitor	^a [Inhibitor] _{1.5xCT} , (nM)	^b Relative potency
TAP-ANV	0.80	86
ANV-6L15	6.0	12
ANV-K _{APP}	9.4	7.3
X-K1 _{TFPI}	10	6.9
15 ANV-KK _{TFPI22-160}	11	6.3
<i>E. coli</i> ala-TFPI	19	<u>3.66.3</u>
ANV	29	2.4
TAP	68	1
C127 FL-TFPI ^c	69	1
20 C127 CT-TFPI ^c	1300	0.053
<i>E. coli</i> TFPI1-160	2750	0.025
6L15	5900	<u>0.0120.017</u>

^a [Inhibitor]_{1.5CT} is the concentration of inhibitor that prolong the tissue factor-induced
clotting time 1.5 fold relative to control (from 40.7 to 61.1sec) as determined from
25 concentration-dependent clotting time curves for each inhibitor.

^b Relative potency is calculated from [Inhibitor]_{1.5CT} using mammalian C127 FL-TFPI as
reference standard (assigning C127 FL-TFPI as 1).

^c C127 FL-TFPI refers to full-length molecules; CT-TFPI refers to molecules truncated at
the carboxyl terminus as described previously (33).